

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) An image-forming device comprising:

an image forming portion forming images on an image recording medium;

a signal-generating portion generating a status-indicating signal indicative of a status of the image forming portion;

a storage portion storing data of the status-indicating signal; and

a storage control portion storing, in the storage portion, data of the status-indicating signal in association with time series data indicative of a series of time.

2. (Original) An image-forming device according to Claim 1, wherein the storage control portion stores, in the storage portion, data of the status-indicating signal when the status-indicating signal changes.

3. (Original) An image-forming device according to Claim 2, wherein the time series data indicates time intervals between successive timings when the status-indicating signal changes in succession.

4. (Original) An image-forming device according to Claim 3, wherein when the status-indicating signal changes, the storage control portion stores the status-indicating signal data and timing data as the time series data, the timing data indicating a length of time that has been elapsed from when the status-indicating signal has changed latest until the time when the status-indicating signal presently changes.

5. (Original) An image-forming device according to Claim 4, wherein the storage control portion includes a timing portion that measures time which has been elapsed from when the status-indicating signal has changed latest until when the status-indicating signal presently changes, the timing portion stopping measuring the elapsed time when a length of

the elapsed time reaches a predetermined time, thereby allowing the time series data to have either one of a value smaller than or equal to the predetermined time and an overflow value indicative of a value greater than the predetermined time.

6. (Original) An image-forming device according to Claim 1,
wherein the image forming portion includes at least one operating member that operates to form images on the image recording medium,
wherein the signal-generating portion includes:
an operation signal supplying portion supplying at least one electric operation signal to the at least one operating member, each operating member operating in accordance with the received operation signal,
at least one sensor detecting at least one portion in the image forming portion and generating at least one detection signal;
an error detection portion determining that an error has occurred and cleared based on the at least one detection signal generated from the at least one sensor and generating an error signal indicative of an error, and
wherein the status-indicating signal includes at least one of the at least one electric operation signal, the at least one detection signal, and the error signal.

7. (Original) An image-forming device according to Claim 1, further comprising an output portion outputting the status-indicating signal data, which is stored in association with the time series data in the storage portion.

8. (Original) An image-forming device according to Claim 7, further comprising:
a connection portion connected to an external device;
a power source; and
a nonvolatile memory,

wherein the output portion outputs the data of the status-indicating signal to either one of the external device, the nonvolatile memory, and the image forming portion,

the nonvolatile memory maintaining the data of the status-indicating signal after the power source is turned off when the nonvolatile memory receives the data of the status-indicating signal,

the image forming portion forming an image of the data of the status-indicating signal onto the image recording medium when the image forming portion receives the data of the status-indicating signal.

9. (Original) An image-forming device according to Claim 8, further comprising an output selection portion enabling an operator to select one of the external device, the nonvolatile memory, and the image forming portion, to which the operator desires to output the data of the status-indicating signal.

10. (Original) An image-forming device according to Claim 7, further comprising:
a mode selection portion enabling an operator to select one of an output enable mode and an output disable mode; and

a mode setting portion setting the output portion into the operator's selected mode, the output portion in the output enable mode executing its output operation, the output portion in the output disable mode failing to execute its output operation.

11. (Original) An image-forming device according to Claim 7, wherein the output portion automatically outputs the data of the status-indicating signal when the status-indicating signal indicates occurrence of error.

12. (Original) An image-forming device according to Claim 11, wherein the output portion outputs the data of the status-indicating signal that has changed within a predetermined period of time before the occurrence of error.

13. (Original) An image-forming device according to Claim 7, wherein the output portion automatically outputs the data of the status-indicating signal when the status-indicating signal indicates clearance of error.

14. (Original) An image-forming device comprising:
an image forming portion forming images on an image recording medium;
a signal-generating portion generating a status-indicating signal indicative of a status of the image forming portion;
a storage portion storing data of the status-indicating signal; and
a storage control portion that stores, in the storage portion, data of the status-indicating signal in the form of a series of data in association with a series of time.

15. (Currently Amended) An image-forming device according to ~~claim 34~~ claim 14, wherein the storage control portion stores the status-indicating signal data in a series of time every time when the status-indicating signal changes.

16. (Original) An image-forming device comprising:
a housing;
an image forming portion mounted in the housing and forming images on an image recording medium;
a sensor disposed in the housing and detecting a status of the image forming portion and generating a detection signal;
a storage portion storing data of the detection signal; and
a storage control portion storing, in the storage portion, data of the detection signal in association with time data indicative of a series of time.

17. (Original) An image-forming device according to Claim 16, wherein when the detection signal changes, the storage control portion stores the detection signal data and time data indicative of when the detection signal changes.

18. (Original) An image-forming device according to Claim 16,
wherein the image forming portion includes a conveying portion conveying the image
recording medium, and

wherein the sensor include a recording medium conveying state detection sensor
detecting a conveying state of the image recording medium.

19. (Original) An image-forming device according to Claim 16,
wherein the sensor includes a plurality of sensors, each detecting a corresponding
status of the image forming portion and generating a detection signal, and

wherein the storage control portion stores, in the storage portion, data of the detection
signal generated from each sensor in association with the time data.

20. (Original) An image-forming device according to Claim 17, further comprising an
error detection portion determining that an error has occurred based on the detection signal
generated from the sensor;

wherein the storage control portion further stores, in the storage portion, data
indicative of the occurrence of error determined by the error detection portion in association
with time data indicative of when the error has occurred.

21. (Original) An image-forming device according to Claim 20, wherein when the
error detection portion determines that an error has occurred, the storage control portion
stores the error data and time data indicative of when the error has occurred.

22. (Original) An image-forming device according to Claim 21, wherein the error
detection portion determines that the error has been cleared based on the detection signal
generated from the sensor;

wherein the storage control portion further stores, in the storage portion, data
indicative of the clearance of error determined by the error detection portion in association
with time data indicative of when the error has been cleared.

23. (Original) An image-forming device according to Claim 22, wherein when the error detection portion determines that an error has been cleared, the storage control portion stores the error data and time data indicative of when the error has been cleared.

24. (Original) An image-forming device according to Claim 23,
wherein the image forming portion includes an operating member that operates to form images on the image recording medium,

further comprising:

an operation signal supplying portion supplying an operation signal to the operating member, the operating member operating in accordance with the operation signal,

wherein the storage control portion stores, in the storage portion, data of the operation signal that the operation signal supplying portion has supplied to the operating member in association with the time data.

25. (Original) An image-forming device according to Claim 24, wherein when the operation signal changes, the storage control portion stores the operation signal data and time data indicative of when the operation signal changes.

26. (Original) An image-forming device according to Claim 25, further comprising an output portion outputting the detection signal data and its associated time data, the error occurrence data and its associated time data, the error clearance data and its associated time data, and the operation signal data and its associated time data.

27. (Original) An image-forming device according to Claim 26, wherein the output portion outputs the data of the error occurrence, the data of the error clearance, and the data of the detection signal and the operation signal that have changed during a prescribed time period up until the error has occurred.

28. (Original) An image-forming device according to Claim 27, further comprising a connection portion connected to an external device, and

wherein the output portion includes an external device output portion outputting the detection signal data and its associated time data, the error occurrence data and its associated time data, the error clearance data and its associated time data, and the operation signal data and its associated time data to the external device.

29. (Original) An image-forming device according to Claim 27, further comprising a nonvolatile memory, and

wherein the output portion includes a memory output portion outputting the detection signal data and its associated time data, the error occurrence data and its associated time data, the error clearance data and its associated time data, and the operation signal data and its associated time data to the nonvolatile memory.

30. (Original) An image-forming device according to Claim 27, wherein the output portion includes a print output portion controlling the image forming portion to print the detection signal data and its associated time data, the error occurrence data and its associated time data, the error clearance data and its associated time data, and the operation signal data and its associated time data on the image recording medium.

31. (Original) An image-forming device according to Claim 27, further comprising:
a mode selection portion enabling an operator to select one of an output enable mode and an output disable mode; and

a mode setting portion setting the output portion into the operator's selected mode, the output portion in the output enable mode executing its output operation, the output portion in the output disable mode failing to execute its output operation.

32. (Original) An image-forming device according to Claim 27, wherein the output portion executes its output operation when the error detection portion determines that an error has occurred.

33. (Original) An image-forming device according to Claim 27, wherein the output portion executes its output operation when the error has been cleared.

34. (Original) An image-forming device according to Claim 25, wherein the storage control portion includes a timing portion measuring time which has been elapsed from a first time when the storage control portion has written data of either one of the detection signal data, the operation signal data, the error occurrence data, and the error clearance data latest until when the storage control portion presently writes data of either one of the detection signal data, the operation signal data, the error occurrence data, and the error clearance data, the storage control portion presently storing the time data that is indicative of a length of the measured time.

35. (Original) An image-forming device according to Claim 34, wherein the timing portion stops measuring the elapsed time when the length of the elapsed time reaches a predetermined value.